

**Amendments to the Claims:**

This listing of the claims will replace all prior versions, and listings, of the claims in the application.

1. (Currently Amended) A method comprising:  
receiving, at a controlling device, a request to transmit data on a communications link from one of a plurality of embedded devices; and  
determining which of the plurality of embedded devices asserted the request,  
wherein any one of the plurality of embedded devices is operable to be the controlling device when given the permission to transmit on the communications link.
2. (Previously Presented) The method of claim 1, wherein the request to transmit data on the communications link is asserted by activating a link request pin.
3. (Previously Presented) The method of claim 1, wherein determining which of the plurality of embedded devices asserted the request comprises addressing one of the plurality of embedded devices and determining whether the addressed device has asserted a confirmation signal.
4. (Previously Presented) The method of claim 3, wherein the controlling device addresses the plurality of embedded devices by a round-robin method.
5. (Currently Amended) The method of claim 3, wherein the confirmation signal is asserted by activating a wait pin, the wait pin being for data flow control, wherein activation of the wait pin indicates a stop of data acceptance.
6. (Previously Presented) The method of claim 1, further comprising transferring permission to transmit data on the communications link from the controlling device to the requesting embedded device.
7. (Canceled).
8. (Previously Presented) The method of claim 1, wherein the plurality of embedded devices includes at least one baseband processor device.

9. (Previously Presented) The method of claim 1, wherein the plurality of embedded devices includes a general purpose processor device.

10. (Previously Presented) The method of claim 1, wherein the plurality of embedded devices is in a radio telephone.

11. (Previously Presented) The method of claim 1, wherein the controlling device is operable to transmit data on the communications link while receiving the request to transmit data on the communications link.

12. (Previously Presented) The method of claim 11, wherein the controlling device is operable to determine whether to transfer permission to transmit data on the communications link to the requesting embedded device.

13. (Currently Amended) A system comprising:  
a plurality of embedded devices;  
a controlling device;  
a communications link coupling the controlling device to the plurality of embedded devices, wherein the controlling device has permission to transmit data on the communications link; and  
a link request pin electrically coupling the plurality of embedded devices, each of the plurality of embedded devices operable to request permission to transmit data on the communications link by activating the link request pin,  
wherein any one of the plurality of embedded devices is operable to be the controlling device when given the permission to transmit on the communications link.

14. (Previously Presented) The system of claim 13, wherein the controlling device is operable to determine which of the plurality of embedded devices is requesting permission to transmit data on the communications link.

15. (Previously Presented) The system of claim 13, wherein each of the plurality of embedded devices comprises a confirmation pin to confirm a request to transmit data on the communications link.

16. (Previously Presented) The system of claim 15, wherein the controlling device is operable to address one of the plurality of embedded devices and determine whether the addressed embedded device has asserted the confirmation pin.

17. (Previously Presented) The system of claim 16, wherein the controlling device is operable to address the plurality of embedded devices by a round-robin method.

18. (Previously Presented) The system of claim 13, wherein the controlling device is further operable to transfer permission to transmit data on the communications link to a requesting embedded device.

19. (Canceled).

20. (Previously Presented) The system of claim 13, wherein the plurality of embedded devices includes at least one baseband processor device.

21. (Previously Presented) The system of claim 13, wherein the plurality of embedded devices includes a general purpose processor device.

22. (Previously Presented) The system of claim 13, wherein the plurality of embedded devices is in a radio telephone.

23. (Previously Presented) The system of claim 13, wherein the controlling device is operable to transmit data on the communications link while receiving the request to transmit data on the communications link.

24. (Previously Presented) The system of claim 23, wherein the controlling device is operable to determine whether to transfer permission to transmit data on the communications link to a requesting embedded device.

25. (Currently Amended) A method, comprising:  
receiving a link request signal, for requesting permission to transmit data on a communications link, at a controlling device from one of a plurality of embedded devices;

performing an arbitration to determine which one of the plurality of embedded devices is the requesting embedded device; and

receiving a confirmation signal at the controlling device from the requesting embedded device,

wherein any one of the plurality of embedded devices is operable to be the controlling device when given the permission to transmit on the communications link.

26. (Previously Presented) The method of claim 25, further comprising transferring permission to transmit data on the communications link to the requesting embedded device.

27. (Previously Presented) The method of claim 25, wherein the arbitration comprises addressing the plurality of embedded devices by a round-robin method.

28. (Previously Presented) The method of claim 1, wherein the communications link accommodates a data rate of at least one hundred megabits per second.

29. (Previously Presented) The system of claim 20, wherein the at least one baseband processor device comprises a CDMA processor, WCDMA processor, Bluetooth processor, or IEEE 802.11 processor.

30. (Currently Amended) A system comprising:  
a plurality of embedded processor means for processing data, wherein each of the plurality of embedded processor means is operable to request permission to transmit data;

controlling means for transmitting data; and

communications means, ~~coupling the controlling means to the plurality of embedded processor means~~, for carrying data transmitted by the controlling means,

wherein any one of the plurality of embedded processor means is operable to be the controlling means when given the permission to transmit on the communications means.

31. (Previously Presented) The system of claim 30, wherein the controlling means is operable to determine which of the plurality of embedded processor means is requesting permission to transmit data on the communications means.

32. (Previously Presented) The system of claim 30, wherein each of the plurality of processor means comprises confirmation means for confirming a request to transmit data on the communications means.

33. (Previously Presented) The system of claim 32, wherein the controlling means is operable to address one of the plurality of processor means and determine whether the addressed processor means has asserted the confirmation means.

34. (Previously Presented) The system of claim 33, wherein the controlling means is operable to address the plurality of processor means by a round-robin method.

35. (Previously Presented) The system of claim 30, wherein the controlling means is further operable to transfer permission to transmit data on the communications means to a requesting processor means.

36. (Previously Presented) The system of claim 30, wherein the plurality of processor means includes at least one baseband processor device.

37. (Previously Presented) The system of claim 30, wherein the plurality of processor means includes a general purpose processor device.

38. (Previously Presented) The system of claim 30, wherein the plurality of processor means is in a radio telephone.

39. (Previously Presented) The system of claim 30, wherein the controlling means is operable to transmit data on the communications means while receiving the request to transmit data on the communications means.

40. (Previously Presented) The system of claim 30, wherein the controlling means is operable to determine whether to transfer permission to transmit data on the communications means to a requesting processor means.

41. (Currently Amended) A method comprising:  
receiving, at a first device of a plurality of embedded devices, a request to transmit data on a communications link from a second device of the plurality of embedded devices, wherein the first device has permission to transmit data on the communications link; and  
determining which of the plurality of embedded devices asserted the request,  
wherein any one of the plurality of embedded devices is operable to transmit data on the communications link and receive the request to transmit data when given the permission to transmit on the communications link.

42. (Previously Presented) The method of claim 41, wherein the request to transmit data on the communications link is asserted by activating a link request pin.

43. (Previously Presented) The method of claim 41, wherein determining which of the plurality of embedded devices asserted the request comprises addressing one of the plurality of embedded devices and determining whether the addressed device asserted a confirmation signal.

44. (Previously Presented) The method of claim 43, wherein the first device addresses the plurality of embedded devices by a round-robin method.

45. (Previously Presented) The method of claim 43, wherein the confirmation signal is asserted by activating a wait pin.

46. (Previously Presented) The method of claim 41, further comprising transferring permission to transmit data on the communications link from the first device to the second device.

47. (Previously Presented) The method of claim 46, wherein transferring permission to transmit data on the communications link further comprises transferring control of the communications link.

48. (Previously Presented) The method of claim 41, wherein permission to transmit data on the communications link includes control of the communications link.

49. (Previously Presented) The method of claim 41, wherein permission to transmit data on the communications link includes an ability to exclusively transmit data on the communications link.

50. (Currently Amended) A system comprising:  
a plurality of embedded devices;  
a first device of the plurality of embedded devices operable to control transmission of data on a communications link~~[[,]] wherein the communications link couples the plurality of embedded devices[[,]] and the first device has~~ having permission to transmit data on the communications link; and  
a link request pin electrically coupling the plurality of embedded devices, each of the plurality of embedded devices operable to request permission to transmit data on the communications link by activating the link request pin,  
wherein each of the plurality of embedded devices is operable to control transmission of data and transmit data on the communications link when given the permission to transmit on the communications link.

51. (Previously Presented) The system of claim 50, wherein each of the plurality of embedded devices comprises a confirmation pin to confirm a request to control the communications link.

52. (Previously Presented) The system of claim 51, wherein the first device is operable to address a second device of the plurality of embedded devices and determine whether the second device has asserted the confirmation pin.

53. (Previously Presented) The system of claim 50, wherein the first device is further operable to transfer permission to transmit data on the communications link to a second device that is requesting permission to transmit data on the communications link.

54. (Previously Presented) The system of claim 50, wherein permission to transmit data on the communications link includes control of the communications link.

55. (Previously Presented) The system of claim 50, wherein permission to transmit data on the communications link includes an ability to exclusively transmit data on the communications link.

56. (Currently Amended) A method comprising:  
receiving a link request signal requesting permission to transmit data on a communications link at a first device of a plurality of embedded devices;  
performing an arbitration to determine which one of the plurality of embedded devices initiated the link request signal; and  
receiving a confirmation signal at the first device from a second device of the plurality of embedded devices, wherein the second device initiated the link request signal.

wherein any one of the plurality of embedded devices is operable to receive the link request signal and perform the arbitration when given the permission to transmit on the communications link.

57. (Previously Presented) The method of claim 56, further comprising transferring permission to transmit data on the communications link from the first device to the second device.

58. (Previously Presented) The method of claim 57, wherein transferring permission to transmit data on the communications link further comprises transferring control of the communications link.

59. (Previously Presented) The method of claim 56, wherein permission to transmit data on the communications link includes control of the communications link.

60. (Previously Presented) The method of claim 56, wherein permission to transmit data on the communications link includes an ability to exclusively transmit data on the communications link.

61. (Previously Presented) The method of claim 56, wherein the arbitration comprises addressing the plurality of embedded devices by a round-robin method.

62. (Currently Amended) A system comprising:



a plurality of embedded processor means for processing data, wherein each of the plurality of embedded processor means is operable to request permission to transmit data; and

first embedded processor means of the plurality of embedded processor means for controlling the transmission of data on a communications means[[:]]

~~communications means, coupling the plurality of embedded processor means, for carrying data transmitted by any one of the plurality of embedded processor means, wherein the first embedded processor means has permission to transmit data on the communications means, and wherein each of the plurality of embedded processor means is operable to transmit data and control the transmission of data on the communication means when given the permission to transmit on the communications means.~~

63. (Previously Presented) The system of claim 62, wherein each of the plurality of embedded processor means comprises confirmation means for confirming a request for permission to transmit data on the communications means.

64. (Previously Presented) The system of claim 63, wherein the first embedded processor means is operable to address second embedded processor means of the plurality of embedded processor means and determine whether the second embedded processor means has asserted the confirmation means.

65. (Previously Presented) The system of claim 62, wherein the first embedded processor means is further operable to transfer permission to transmit data on the communications means to a second embedded processor means that is requesting permission to transmit data on the communications means.

66. (Previously Presented) The system of claim 62, wherein permission to transmit data on the communications means includes control of the communications means.

67. (Previously Presented) The system of claim 62, wherein permission to transmit data on the communications means includes an ability to exclusively transmit data on the communications means.